Giunti Labs
A Giunti Group company

EC Mobile Research Projects

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Giunti Labs – EU Mobile Research

- Who we are
  - Giunti Labs: a brief background

- Mobile related research projects:
  - **Key to nature**: bio-diversity for education
  - **Ensemble project**: lifelong learning
  - **CONTSENS**: geo-located SCORM objects
  - **IRMOS**: QOS for mobile applications

  - **iCoper**: eLearning standards best practices

A postcard from Giunti Labs
Headquarter and R&D
Bay of Silence, Sestri Levante - Italy

Giunti Labs R&D

- **Our vision**:
  - *Information and learning are the pillars of evolution*. Giunti Labs R&D projects focus on the creation of distributed, scalable and personalized systems for ubiquitous access to information.

- **Our mission**:
  - To imagine and execute innovative technology based solutions for content

  - To fulfil leading technical roles in EU R&D projects in the fields of ePublishing, eKnowledge and eLearning that focus on future technologies

Giunti Labs R&D – Over 15 years of research

- In **1994** Giunti Group acquired Interactive Labs from Hay Group, one of Europe's first learning content design and production studios

- In **1997** Interactive Labs participates in FP4 projects focusing on the design of digital contents for new media

- In **2000** Interactive Labs opened Giunti Research to search and develop new generation Learning Content Management Solutions

- In **2001** and 2002 Interactive Labs coordinates its first European projects focused on mobile learning and semantic knowledge

- In **2003** Giunti Reseach and Interactive Labs merged in Giunti Interactive Labs (now Giunti Labs)

- Since **2003** Giunti Labs participated in several tens of research projects in FP4, FP5, FP6 and FP7 with more than 300 industrial and academic partners

Research and Development

- Giunti Labs R&D is an international centre for applied research on all aspects of CONTENT and Technology Based Learning

- The result are innovative solutions to support:

  » LifeLong Learning
  » Mobile content management and delivery
  » Industrial maintenance
  » Healthcare training
  » Edutainment solutions for museums and public infrastructure
  » Bridging the gap between learning and business processes

- **EU Project Area:** eContentPlus

- **Partners**
University of Trieste (IT),T&B e Associati srl(IT), ETI Bioinformatics (NL), Biologische Bundesanstalt für Land und Forstwirtschaft (DE), Friedrich Alexander Univ. FIM Neues Lernen (DE), Real Jardín Botánico – Consejo Superior de Investigaciones Científicas (ES), Evolaris Research Lab (AT), K.U. Leuven, Centre For Usability Research (BE), Institute of Botany & Ecology, University of Tartu (EE), Slovenian Museum of Natural History (SI), Technical University of Cluj-Napoca (RO), Bikam ltd (BG), Natural History Museum, London (UK), Giunti Labs srl (IT)

- **Objectives**
Improve the searchability and usability of existing digital contents for the emergence of a European educational service related to teaching and learning biodiversity.

- **URL:** http://www.keytonature.eu/

- **Start:** Sept 2007 **End:** Aug 2010

- **Giunti's main role:** content creation and tagging mechanism for palm-top devices

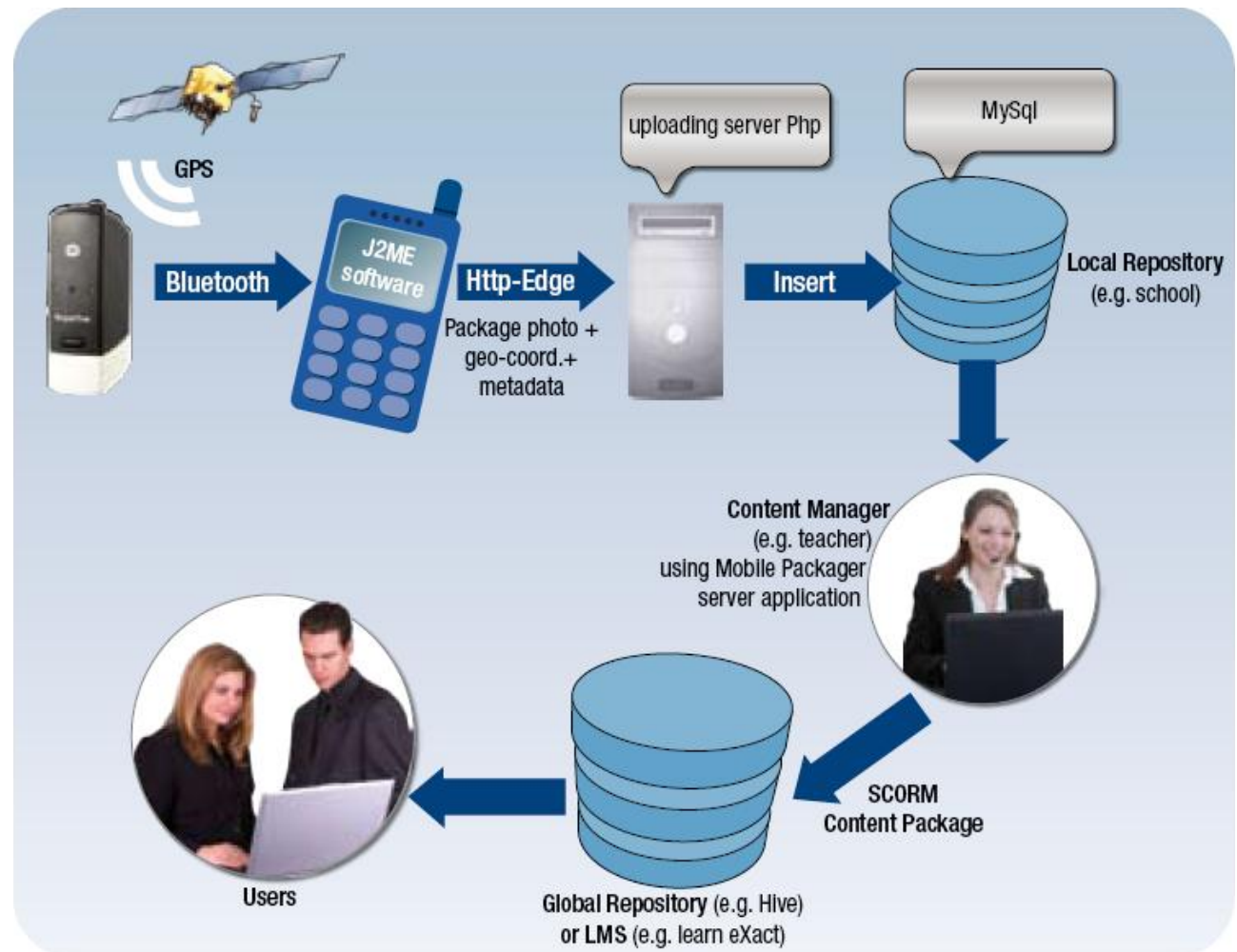- **Project Costs (Giunti Labs):** 2.4 ML€ (109K€)

KeyToNature

Interactive e-tools for learning and teaching biodiversity

Mobile Packager: the flow of things

- **EU Project Area:** **Leonardo da Vinci**
  LifeLong Learning 2008, GRUNDTVIG (adult education)

- **Partners**
  University of Florence, Municipality of Prato, Giunti Labs, Yvelines District Council

- **Objectives**
  Mobile learning to foster the integration of first- and second-generation immigrants

- **URL:** http://www.ensembleproject.eu

- **Start:** November 2008 **End:** October 2010

- **Giunti's main role:**
  Mobile contents design and production (mms, podcasting)

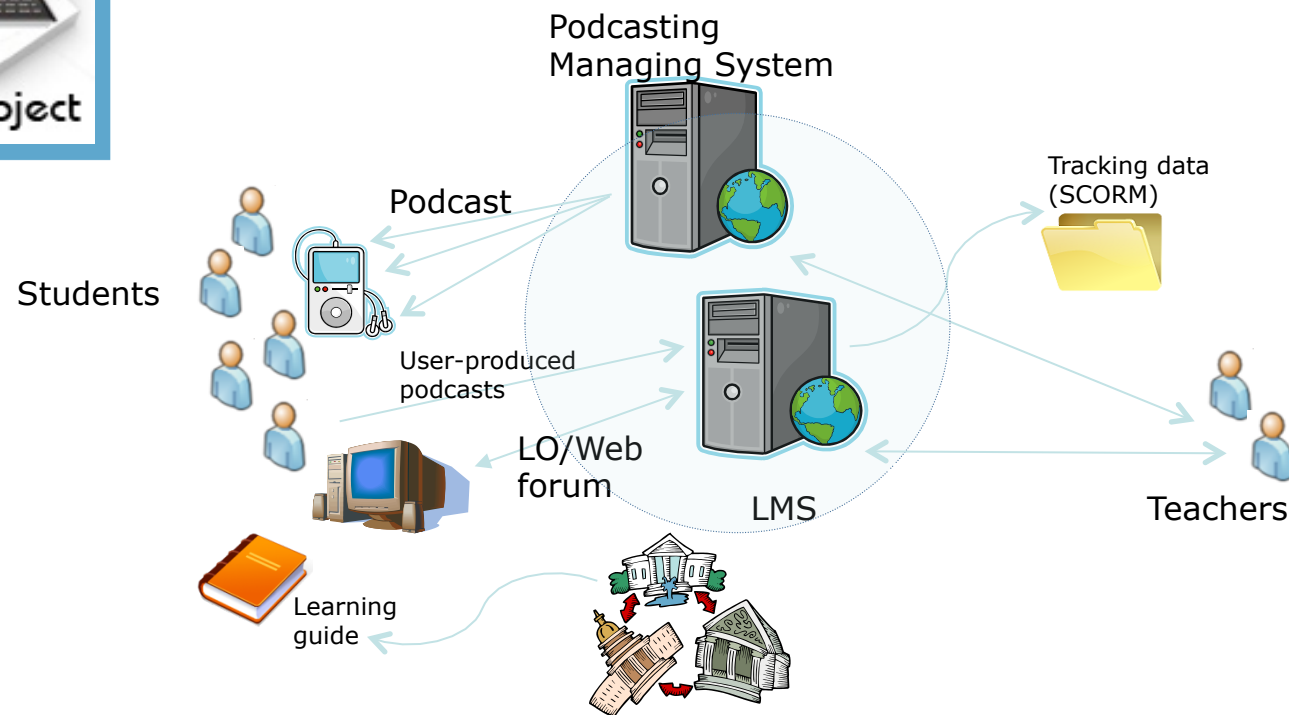- **Project Costs (Giunti Labs):** 500 K€ (83 K€)

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Ensembleproject

ENSEMBLE

European citizeNShip lifElong MoBile Learning

Ensemble: Podcast production

Podcasting Managing System

Podcast

Students

Tracking data (SCORM)

User-produced podcasts

LO/Web forum

LMS

Teachers

Learning guide

Ensemble: content production plan

Modules:

- A. European citizenship
- B. Intercultural education
- C. School life issues (to be parent of/to be son/students)
- D. Food, health, drugs and alcohol problems

Media	End user	Full event	Module	Unit	Objects to be produced
MMS	Adult	4 Modules	4 Didactical Units	5 MMS + MMS	4*4*(5+5)= 160 MMS
Podcast	Student	4 Modules	4 Didactical Units	5 Podcasts	4*4*5 = 80 Podcast + 2 LO (2 for each module)

'Learning' objective: to combine information and content/knowledge technologies in innovative environments (with particular attention to mobile and virtual reality) and services for life long learning

Ensemble: MMS production

MMS/SMS Managing System

MMS

Users

SMS

Learning guide

Tracking data (answers from SMS)

Tutor
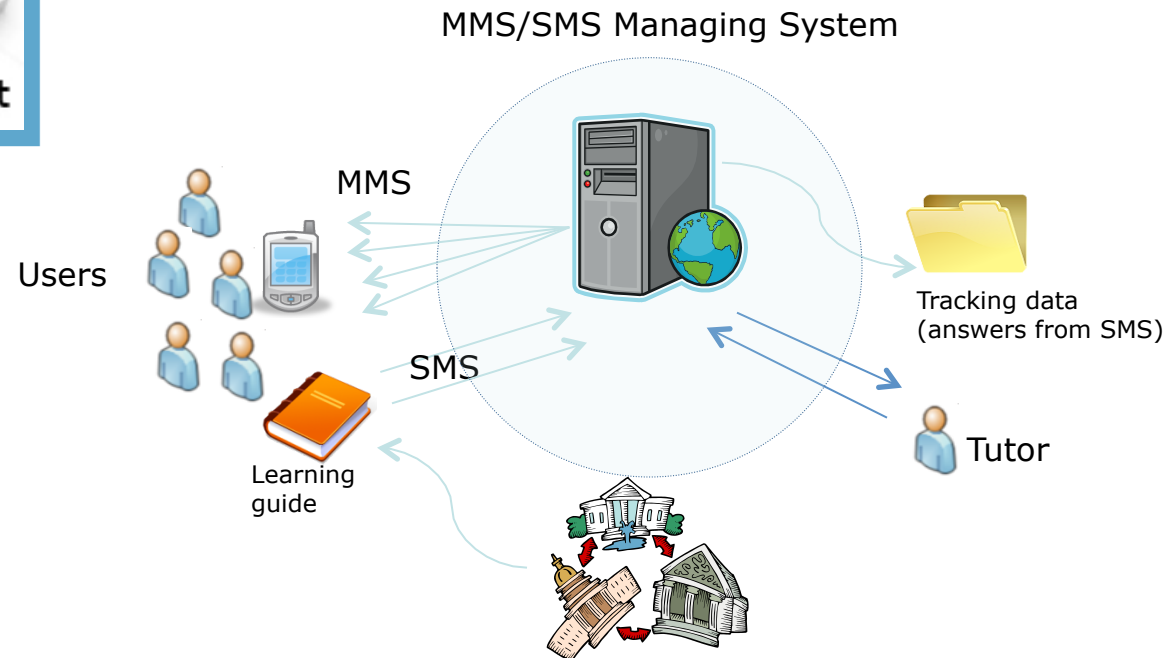
- **EU Project Area:** **Leonardo da Vinci**

LLP2007 "Multilateral projects for development of innovation"

- **Partners**

Ericsson Education Ireland (EI), European Consortium for the Learning Organization (BE), Plovdiv Univerity "Paisii Hidendarski" (BG), Corvinno Technology Transfer Center Ltd. (HU), Giunti Labs S.r.l. (IT), London Metropolitan University (UK)

- **Objectives**

The aim of this project is to avail of the latest technological developments to support the development of innovative ICT-based content, services, pedagogies and practice for lifelong learning and to bring mobile learning to the next level.

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- **URL:** **http://www.ericsson.com/contsens**

- **Start:** January 2008 **End:** December 2009

- **Giunti's main role**

Use of context sensitive technologies in mobile and language learning and definition of the exploitation strategy.

- **Project Costs:** 520 K Euro

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LIFELONG LEARNING PROGRAMME
Using Wireless Technologies for Context Sensitive Education and Training

The partnership for the using wireless technologies for context sensitive education and training project is:
- LM Ericsson Education, Ireland
- University of Plovdiv, Bulgaria
- Giunti Labs, Italy
- Corvinno Technology Transfer Centre, Hungary
- London Metropolitan University, United Kingdom
- The European Consortium for the Learning Organisation, (ECLO), Belgium

For more information please consult: www.ericsson.com/contsens

CONTSENS

Using wireless technologies for context sensitive education and training
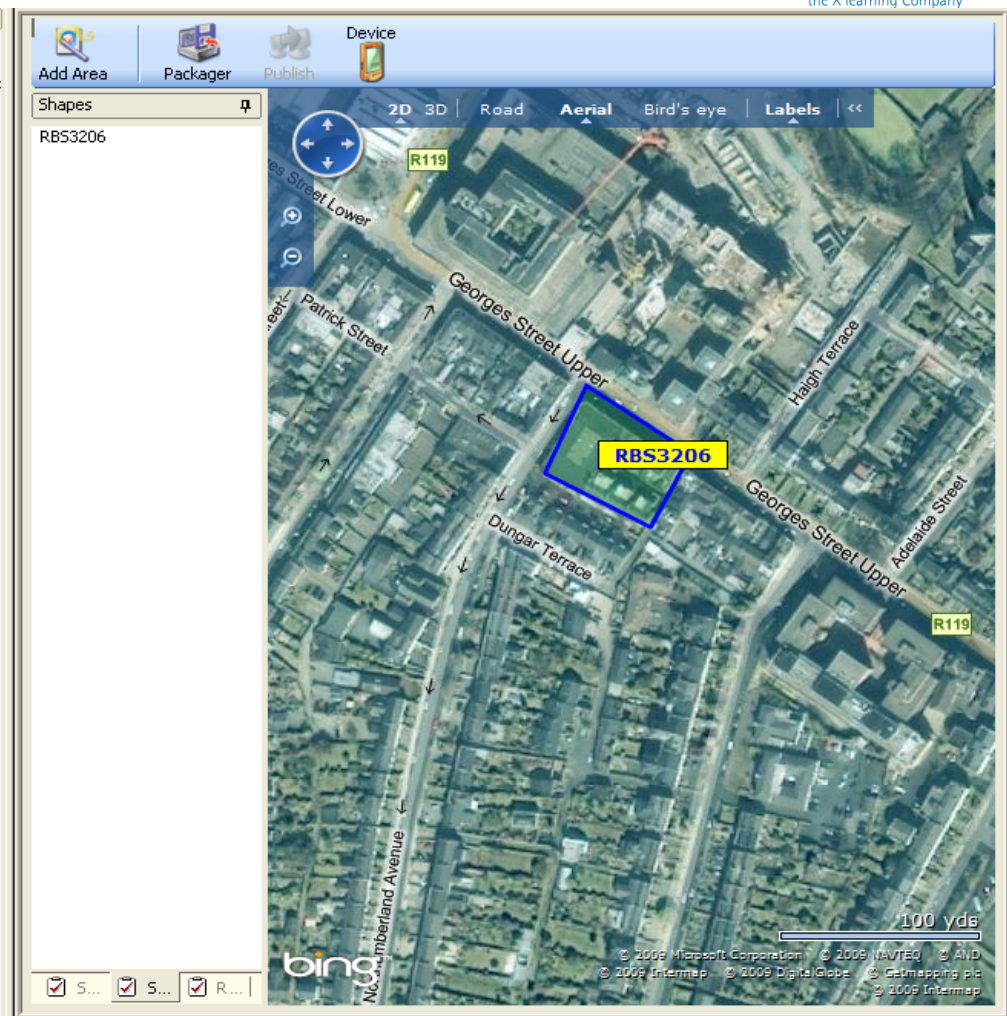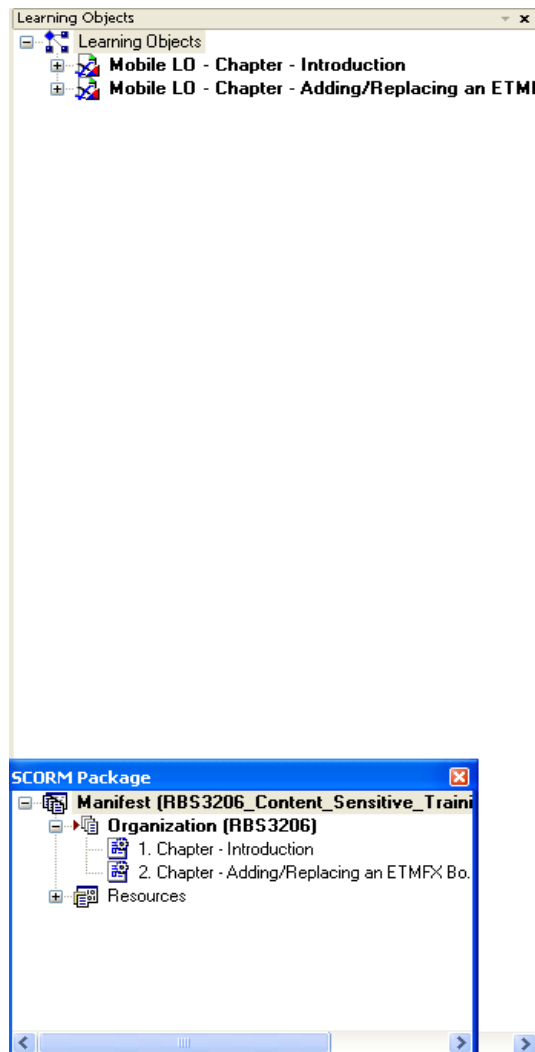
CONTSENS: geo-located content to mobile

- Multi Device   Rendering
  - (Windows Mobile, J2ME, and Blackberry OS)
- Standard SCORM Content Packages Flexible Publishing
  - (Push, Pull, Link & Tracking)
- GPS, Wi-Fi/ RFID Location Detection
- Chat , Forum and other collaborative services

- Ericsson details:
  - Experia X1
  - Windows mobile

Geo tagging content (con't)

CONTSENS – findings (Ericsson)

- Population: 38 users

- 97.37% Would like to continue using mobile learning.
- 89% would recommend mobile learning to others
- 76.31% found that the mobile device enhanced the learning experience
- 76.32% found the learning experience to be fun

- More info available at:
    - http://www.ericsson.com/ericsson/corpinfo/programs/using_wireless_technologies_for_context_sensitive_education_and_training/products.shtml

CONTSENS – what are they saying…

- Generic comments:
  - Very good. Good refresher if just about to perform a task not so familiar with. Be careful thought it shouldn't replace CPI. Eyes tired by the end thought even though only after 5-7 minutes. Maybe that's my age!
  - This is not a course This is a structured knowledge transfer for on the job activities – excellent.

- How did mobility enhance the learning experience?
  - It provides quick, relevant information when needed during field maintenance work, of wherever you are.
  - This course was a series of instructions on how to perform tasks: the instructions were clear and confidence boosting.

- **EU Project Area:** IP project, VII FP
 ICT-2007.1.2 "Service and Software Architectures, Infrastructures and Engineering"

- **Partners**
 Xyratex (UK), Universität Stuttgart (DE), Institute of Communication & Computer Systems – National Technical ,University of Athens (GR), Alcatel-Lucent Deutschland AG (DE), STIFTELSEN SINTEF (NO), University of Southampton (UK), Scuola Superiore Sant'Anna (IT), Telefonica (ES), Giunti Labs S.r.l. (IT), Grass Valley Germany GmbH (DE), Deutsche Thomson OHG (DE)

- **Objectives**
Design, develop, integrate and validate a Service Oriented Infrastructure that enables a broad range of interactive real-time applications like interactive collaborative e-learning.

- **URL:** http://www.irmosproject.eu

- **Start:** February 2008 **End:** January 2011

- **Giunti's main role:**
Outdoor mobile learning scenarios with real-time position tracking, educational virtual learning worlds

- **Project Costs (Giunti Labs):** 12.7 ML Euro (308K€)

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IRMOS

Interactive Realtime Multimedia Applications on Service Oriented Infrastructures

IRMOS

Interactive Real-time Multimedia Applications on Service Oriented Infrastructures
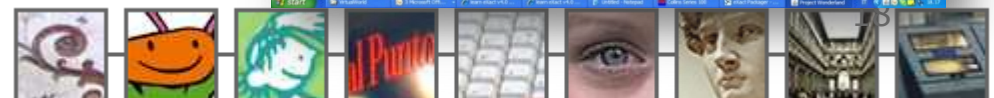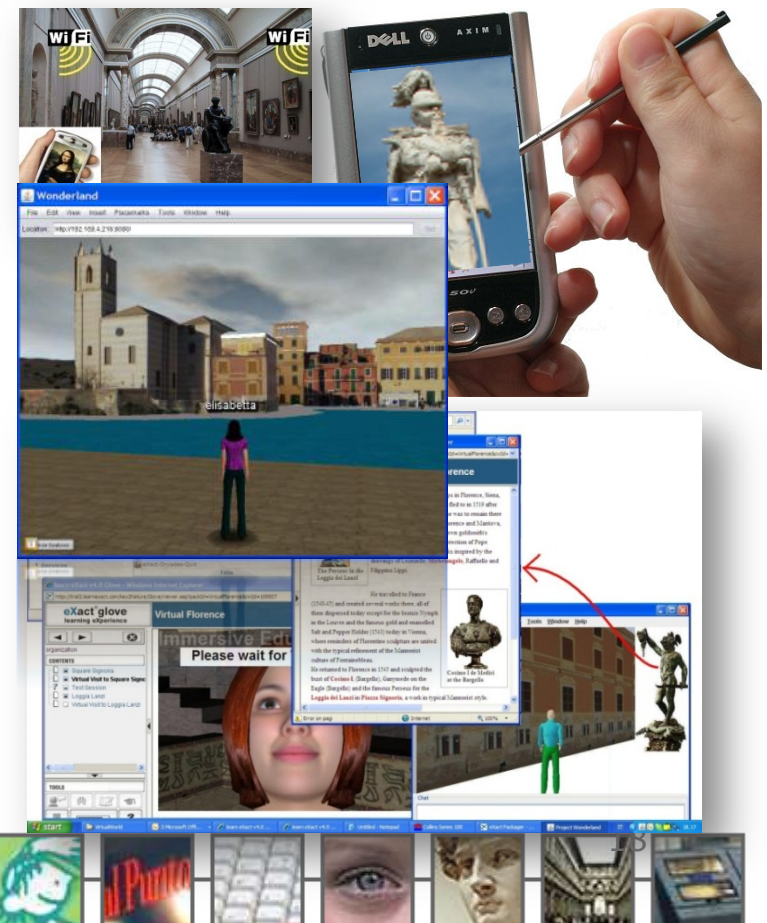
IRMOS – background info

- Mobile applications are increasingly popular
- **mobility** in eLearning is increasingly demanded
- Real time **Quality Of Service** is critical if we are to provide different types of users with a different level of service

- Examples scenarios:
  - Football match in Liverpool: a tourist agent wants to enable a pay-per-know location aware service
  - Queen Elisabeth visiting Paris: the Mayor wants to enable a service for elitist presentations
  - School trip in Paris: the school director wants to enable a service for outdoor edutainment

Storyboard

Tour Eiffel

Points of interest

Pupils School

Queen Elisabeth

tions

- **EU Project Area: eContentPlus** (Best Practice Network)

- **Partners**
Wirtschaftsuniversität Wien, UK Open University, University of Cyprus, University of Leicester, Open University of the Netherlands, University of Jyväskylä, imc, Tallinn University, Centre for Educational Technology, Chambre de Commerce et d'Industrie de Paris -HEC, Jozef Stefan Institute, NCSR Demokritos, Institut National des Télécommunications, University of Vienna, Universidad Carlos III de Madrid, AGH University of Science and Technology, Kaunas University of Technology, Knowledge Markets Consulting, Oslo University College, Synergetics nv, GiuntiLabs, KU Leuven, Umeå University, Department of Interactive Media and Learning, Humance.

- **Objectives**
Best Practices addressing the exchange of competency models in a cross-cultural educational context, learning designs, federated search and harvesting, reuse of instructional models and content.

- **URL: http://www.icoper.org**

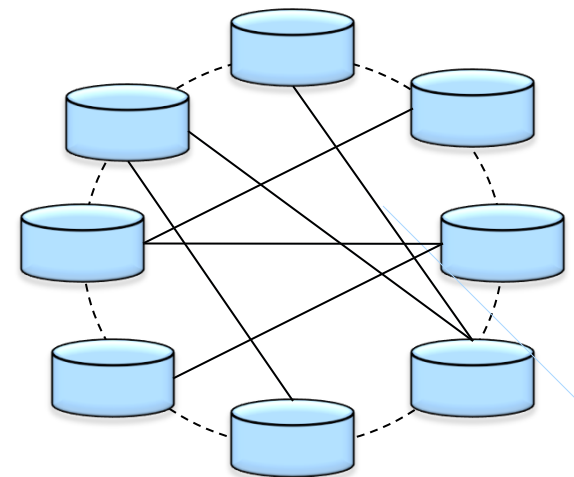- **Start:** September 2008 **End:** February 2011

- **Giunti's main role**
Infrastructure for the online training (PC, Mobile), Open Interfaces for searching/retrieval of digital contents (SQI, OKI, OAI)

- **Project Costs (Giunti Labs):** 4.8 ML€ (272 K€)

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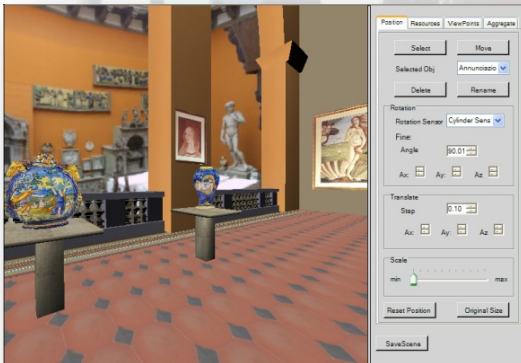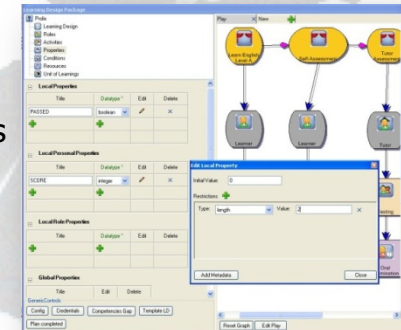*Interoperable Content for Performance in a Competency-driven Society*
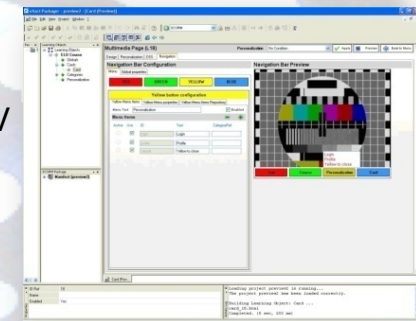
Giunti Labs R&D and the future

Advanced mobile learning for contextualized and personalized ubiquitous learning

Enhanced Learning Design to support latests pedagogical approaches for formal and informal learning

Virtual Reality simulation to deliver an immersive user experience and trial the most diverse operative scenarios

T-Learning on iDTV

Competency mangement : integration of LMS and HR systems to align competency development plans and learning

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Thank you!